

**REMARKS**

At the time the Office Action issued, claims 1 –47 were pending.

**Objections to the Specification**

Attorney has amended the Abstract and respectfully submits that the amended Abstract meets the requirements of MPEP §608.01(b).

**Objections to the Claims**

Attorney has amended the claims to address the objections raised in Paragraphs 2 and 3 of the Office Action. Attorney respectfully submits that the claims as amended are patentable.

**Rejection Under 35 USC §112, Second Paragraph**

In Paragraphs 4 and 5 of the Office Action, the Examiner rejects claims 41 – 44 under 35 USC §112, Second Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, with respect to claim 41, step (c), the formula applied in the resistance is improper. It is stated that resistance cannot equal specific electrical resistance x length cross-sectional area. Attorney respectfully traverses the rejection.

It is well known that resistance  $R$ , is equal to:

$$R = \frac{\rho \times L}{A}$$

where  $\rho$  is the specific electrical resistance of the material,  $L$  is the length of the material and  $A$  is the cross-sectional area of the material sample. See, Spec. page 12, line 5. See also, <http://www.free-definition.com/Electrical-resistance.html>. The possible confusion may have come in that cross-sectional area was likewise underlined, which may have lead the Examiner to believe that it was multiplied by the length. Attorney has amended claim 41 by removing the underlining under the cross-sectional area. Attorney respectfully submits that claim 41 and its dependent claims 42 – 44 are patentable over the cited art.

**Conclusion**

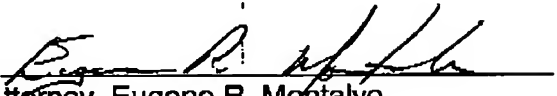
Attorney has responded to all objections and bases for rejection and respectfully submits that the claims, as amended are in a state ready for allowance. In the event the Examiner has

any questions or issues related to this Response, the Examiner is invited to call the undersigned at the number below prior to the issuance of any written action.

Respectfully submitted,

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